Response Action Outcome (RAO) Statement
[310 CMR 40.1056]

Arcade Realty Trust
ATF-Davidson Property
355 Main Street
Whitinsville (Northbridge), MA

Release Tracking Number 2-0111

Prepared by

Neal M. Drawas, LSP
Kroll Associates, Inc.
900 Third Avenue
New York, NY 10022

December 1998

Massachusetts Department of Environmental Protection **BWSC-104**
Bureau of Waste Site Cleanup

RESPONSE ACTION OUTCOME (RAO) STATEMENT & DOWNGRADIENT PROPERTY STATUS TRANSMITTAL FORM

Pursuant to 310 CMR 40.0180 (Subpart B), 40.0580 (Subpart E) & 40.1056 (Subpart J)

Release Tracking Number: 2 - 0111

A. SITE OR DOWNGRADIENT PROPERTY LOCATION:

Site Name: (optional) ATF Davidson

Street: 1 Main Street Location Aid: opposite Whitin Pond

City/Town: Northbridge ZIP Code: 01588

[X] Check here if this Site location is Tier Classified. If a Tier I Permit has been issued, state the Permit Number:

Related Release Tracking Numbers that this Form Addresses: 2-11846

If submitting an RAO Statement, you must document the location of the Site or the location and boundaries of the Disposal Site subject to this Statement. If submitting an RAO Statement for a PORTION of a Disposal Site, you must document the location and boundaries for both the portion subject to this submittal and, to the extent defined, the entire Disposal Site. If submitting a Downgradient Property Status Submittal, you must provide a site plan of the property subject to the submittal and, to the extent defined, the Disposal Site.

B. THIS FORM IS BEING USED TO: (check all that apply)

[X] Submit a **Response Action Outcome (RAO) Statement** (complete Sections A, B, C, D, E, F, H, I, J and L).

[ ] Check here if this is a revised RAO Statement. Date of Prior Submittal:

[ ] Check here if any Response Actions remain to be taken to address conditions associated with any of the Releases whose Release Tracking Numbers are listed above. This RAO Statement will record only an RAO-Partial Statement for those Release Tracking Numbers.

Specify Affected Release Tracking Numbers:

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[ ] Submit an optional **Phase I Completion Statement supporting an RAO Statement or Downgradient Property Status Submittal** (complete Sections A, B, H, I, J, and L).

[ ] Submit a **Downgradient Property Status Submittal** (complete Sections A, B, G, H, I, J and K).

[ ] Check here if this is a revised Downgradient Property Status Submittal. Date of Prior Submittal:

[ ] Submit a **Termination of a Downgradient Property Status Submittal** (complete Sections A, B, I, J and L).

[ ] Submit a **Periodic Review Opinion evaluating the status of a Temporary Solution** (complete Sections A, B, H, I, J and L).

Specify one: [ ] For a Class C RAO [ ] For a Waiver Completion Statement indicating a Temporary Solution

Provide Submittal Date of RAO Statement or Waiver Completion Statement:

You must attach all supporting documentation required for each use of form indicated, including copies of any Legal Notices and Notices to Public Officials required by 310 CMR 40.1400.

C. DESCRIPTION OF RESPONSE ACTIONS: (check all that apply)

[X] Assessment and/or Monitoring Only

[ ] Removal of Contaminated Soils

- [ ] Re-use, Recycling or Treatment
  - ( ) On Site ( ) Off Site Est. Vol.: _____ cubic yards
  - Describe: _____
- [ ] Landfill ( ) Cover ( ) Disposal Est. Vol.: _____ cubic yards

[ ] Removal of Drums, Tanks or Containers

Describe: _____

[ ] Removal of Other Contaminated Media

Specify Type and Volume: _____

[ ] Other Response Actions

Describe: _____

[ ] Deployment of Absorbant or Contaminent Materials

[ ] Temporary Covers or Caps

[ ] Bioremediation

[ ] Soil Vapor Extraction

[ ] Structure Venting System

[ ] Product or NAPL Recovery

[ ] Groundwater Treatment Systems

[ ] Air Sparging

[ ] Temporary Water Supplies

[ ] Temporary Evacuation or Relocation of Residents

[ ] Fencing and Sign Posting

SECTION C IS CONTINUED ON THE NEXT PAGE.

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Release Tracking Number: 2 - 0111

C. DESCRIPTION OF RESPONSE ACTIONS: (continued)

☐ Check here if any Response Action(s) that serve as the basis for this RAO Statement involve the use of Innovative Technologies. (DEP is interested in using this information to create an Innovative Technologies Clearinghouse.)

Describe Technologies: _____

D. TRANSPORT OF REMEDIATION WASTE: (if Remediation Waste was sent to an off-site facility, answer the following questions)

Name of Facility: N/A

Town and State: _____

Quantity of Remediation Waste Transported to Date: _____

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E. RESPONSE ACTION OUTCOME CLASS:

Specify the Class of Response Action Outcome that applies to the Site or Disposal Site. Select **ONLY** one Class:

☐ **Class A-1 RAO**: Specify one of the following:

○ Contamination has been reduced to background levels. ○ A Threat of Release has been eliminated.

☐ **Class A-2 RAO**: You **MUST** provide justification that reducing contamination to background levels is infeasible.

☐ **Class A-3 RAO**: You **MUST** provide both an implemented Activity and Use Limitation (AUL) and justification that reducing contamination to background levels is infeasible.

If applicable, provide the earlier of the AUL expiration date or date the design life of the remedy will end: _____

☒ **Class B-1 RAO**: Specify one of the following:

○ Contamination is consistent with background levels (X) Contamination is **NOT** consistent with background levels.

☐ **Class B-2 RAO**: You **MUST** provide an implemented AUL.

If applicable, provide the AUL expiration date : _____

☐ **Class C RAO**: ☐ Check here if you will conduct post-RAO Operation, Maintenance and Monitoring at the Site.

Specify One: ○ Passive Operation and Maintenance ○ Monitoring Only

○ Active Operation and Maintenance (defined at 310 CMR 40.0006)

F. RESPONSE ACTION OUTCOME INFORMATION:

☐ If an RAO Compliance Fee is required, check here to certify that the fee has been submitted. You **MUST** attach a photocopy of the payment.

☐ Check here if submitting one or more AULs. You must attach an AUL Transmittal Form (BWSC-113) and a copy of each implemented AUL related to this RAO Statement. Specify the type of AUL(s) below: (required for all Class A-3 RAOs and Class B-2 RAOs)

○ Notice of Activity and Use Limitation ○ Grant of Environmental Restriction Number of AULs attached: _____

Specify the Risk Characterization Method(s) used to achieve the RAO described above and all Soil and Groundwater Categories applicable to the Site.

More than one Soil Category and more than one Groundwater Category may apply at a Site.
Be sure to check off all APPLICABLE categories, even if more stringent soil and groundwater standards were met.

Risk Characterization Method(s) Used:	☒ Method 1	☐ Method 2	☐ Method 3
Soil Category(ies) Applicable:	☐ S-1	☒ S-2	☐ S-3
Groundwater Category(ies) Applicable:	☐ GW-1	☐ GW-2	☒ GW-3

> **When submitting any Class A-1 RAO or a Class B-1 RAO where contamination is consistent with background levels, do NOT specify a Risk Characterization Method.**

> **When submitting any Class A-2 RAO or a Class B-1 RAO where contamination is NOT consistent with background levels, you cannot use an AUL to maintain a level of no significant risk. Therefore, you must meet S-1 Soil Standards, if using Risk Characterization Method 1.**

Massachusetts Department of Environmental Protection **BWSC-104**
Bureau of Waste Site Cleanup

RESPONSE ACTION OUTCOME (RAO) STATEMENT & DOWNGRADIENT PROPERTY STATUS TRANSMITTAL FORM

Pursuant to 310 CMR 40.0180 (Subpart B), 40.0580 (Subpart E) & 40.1056 (Subpart J)

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G. DOWNGRADIENT PROPERTY STATUS SUBMITTAL:

☐ If a Downgradient Property Status Submittal Compliance Fee is required, check here to certify that the fee has been submitted. You **MUST** attach a photocopy of the payment.

☐ Check here if a Release(s) of Oil or Hazardous Material(s), other than that which is the subject of this submittal, has occurred at this property.

Release Tracking Number(s): _____

◯ Check here if the Releases identified above require further Response Actions pursuant to 310 CMR 40.000 .

Required documentation for a Downgradient Property Status Submittal includes, but is not limited to, copies of notices provided to owners and operators of both upgradient and downgradient abutting properties and of any known or suspected source properties.

H. LSP OPINION:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this transmittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and (iii) the provisions of 309 CMR 4.03(5), to the best of my knowledge, information and belief,

> *if Section B indicates that a **Downgradient Property Status Submittal** is being provided,* the response action(s) that is (are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in 310 CMR 40.0183(2)(b), and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> *if Section B indicates that either an **RAO Statement, Phase I Completion Statement and/or Periodic Review Opinion** is being provided,* the response action(s) that is (are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal.

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

☐ Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approval(s) issued by DEP or EPA. If the box is checked, you MUST attach a statement identifying the applicable provisions thereof.

LSP Name: Neal M. Drawas LSP #: 9844 Stamp: COMMONWEALTH OF MASSACHUSETTS NEAL M. DRAWAS No. 9844 REGISTERED LICENSED SITE PROFESSIONAL

Telephone: 978-443-1833 Ext.: _____

FAX: (optional) 978-443-1929

Signature: _____

Date: Oct. 10, 1998

I. PERSON MAKING SUBMITTAL:

Name of Organization: Arcade Realty Trust

Name of Contact: Leonard Jolles Title: Property Mgr.

Street: 1 Main Street

City/Town: Whitinsville (Northbridge) State: MA ZIP Code: 01588

Telephone: 508-234-6301 Ext.: _____ FAX: (optional) _____

J. RELATIONSHIP TO SITE OF PERSON MAKING SUBMITTAL: (check one)

☒ RP or PRP Specify: ⊗ Owner ◯ Operator ◯ Generator ◯ Transporter Other RP or PRP: _____

☐ Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)

☐ Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))

☐ Any Other Person Submitting This Form Specify Relationship: _____

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K. CERTIFICATION OF PERSON SUBMITTING DOWNGRADIENT PROPERTY STATUS SUBMITTAL:

I, _____, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form; (ii) that, based on my inquiry of the/those individual(s) immediately responsible for obtaining the information, the material information contained herein is, to the best of my knowledge, information and belief, true, accurate and complete; (iii) that, to the best of my knowledge, information and belief, I/the person(s) or entity(ies) on whose behalf this submittal is made satisfy(ies) the criteria in 310 CMR 40.0183(2); (iv) that I/the person(s) or entity(ies) on whose behalf this submittal is made have provided notice in accordance with 310 CMR 40.0183(5); and (v) that I am fully authorized to make this attestation on behalf of the person(s) or entity(ies) legally responsible for this submittal. I/the person(s) or entity(ies) on whose behalf this submittal is made is/are aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

By: _____ Title: _____
(signature)

For: _____ Date: _____
(print name of person or entity recorded in Section I)

Enter address of the person providing certification, if different from address recorded in Section I:

Street: _____

City/Town: _____ State: _____ ZIP Code: _____

Telephone: _____ Ext.: _____ FAX: (optional) _____

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DEP
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L. CERTIFICATION OF PERSON MAKING SUBMITTAL:

If you are completing only a Downgradient Property Status Submittal, you do not need to complete this section of the form.

I, Leonard Jolles, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

By: _____ Title: Property Manager
(signature)

For: Arcade Realty Trust Date: Dec 11, 1998
(print name of person or entity recorded in Section I)

Enter address of the person providing certification, if different from address recorded in Section I:

Street: same

City/Town: _____ State: _____ ZIP Code: _____

Telephone: _____ Ext.: _____ FAX: (optional) _____

YOU MUST COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE, AND YOU MAY INCUR ADDITIONAL COMPLIANCE FEES.

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Response Action Outcome (RAO) Statement

Arcade Realty Trust
ATF-Davidson Property
355 Main Street
Whitinsville (Northbridge), MA

RTN 2-0111

A. Site Description

The subject property is located at 355 Main Street in the Whitinsville section of the town of Northbridge, Worcester County, Massachusetts. The Site was incorrectly identified as One Main Street when DEP originally assigned the Disposal Site Number (2-0111). The boundaries of the Site are shown in the Site Plan (Fig. 3). Figure 1 provides the Site Locus based on the U.S. Geological Survey topographical map, Uxbridge Quadrangle. The Site is located at 4,665,418 mN, 278,463 mE using Universal Transverse Mercator (UTM) coordinates and at 42°06'41" north latitude, 71°40'46" west longitude.

Figure 2 is the MA DEP Priority Resources GIS Map which identifies potential environmental receptors within a 500-foot and 1/2-mile radius. Figure 3 is a Site Plan which identifies features relevant to this submittal including groundwater flow contours calculated from the data shown in Table 2.

The 27 acre parcel is zoned for commercial/industrial use. The property is owned by Arcade Realty Trust and is leased for light manufacturing, warehousing and distribution. The existing 194,000 square foot building was recently expanded by 50,000 square feet. The area immediately adjacent to the building on all sides is asphalt paved for driveways and parking areas. The majority of the eastern and western portions of the property remain unpaved. The area around the Site is a mixture of commercial and residential properties along Main Street and primarily residential properties to the west and north. The Site is bounded on the south by the Mumford River.

A complete site description including a site history is given in the Phase I Initial Site Investigation Report dated March 1997. The Phase I Report was previously submitted to the Mass. Dept. of Environmental Protection (DEP) and is included by reference.

A Class A-3 RAO Statement for a petroleum release within the northern portion of the property (RTN 2-11846) was previously submitted to DEP in October 1997.

B. Class of RAO and Risk Characterization Method

In accordance with the Response Action Performance Standard (RAPS) contained in 310 CMR 40.0191 of the Massachusetts Contingency Plan (MCP), a permanent solution has been achieved with a level of No Significant Risk to safety, health, public welfare and the environment. This Statement is being submitted demonstrating that a Class B-1 Response Action Outcome (RAO) has been achieved with no Activity and Use Limitation (AUL) needed to maintain the level of No Significant Risk. The MCP Method 1 Cleanup Standards were used to characterize potential risks at the Site.

C. Description of Release, Site Conditions and Receptors

Volatile organic compounds (VOCs) and heavy metals were identified in groundwater after the installation of monitoring wells in 1985. As a result, the Site was listed as a Confirmed Non-Priority Site by DEP on October 15, 1987 and was assigned Disposal Site Number 2-0111. The Site was subsequently Classified as Tier II under the Massachusetts Contingency Plan (MCP) with a Site Score of 216. The Tier Classification Transmittal, Numerical Ranking Scoresheet (NRS) and Licensed Site Professional (LSP) Evaluation Opinion were submitted to DEP concurrently with the Phase I Report in March 1997.

The VOCs, including tetrachloroethylene and its decomposition products, were limited to four (4) monitoring wells on the southern portion of the property along the access road running parallel to the Mumford River. Barium has been identified in two (2) wells which are also located along the southern boundary of the property.

The source of the contamination has been identified as the historic disposal of foundry sand and incidental disposal of solvents at the Site.

Potential sensitive environmental receptors are shown on the MA DEP GIS Priority Resources Map (Fig. 2). The GIS Map incorrectly indicates that the Site lies within the Interim Wellhead Protection Area (IWPA) for the Whitinsville Water Company's Whitin Pond well field. Previously submitted engineering documentation prepared by the water company's consultant (Whitman & Howard) specifies a defined Zone II area of contribution which is off-site and upgradient of the Whitin Pond section of Mumford River which borders the Site. Figure 2 also shows the defined Zone II within the erroneous IWPA.

Potential environmental receptors identified within 500 feet are the Whitin Pond section of the Mumford River to the south and a portion Arcade Pond and the associated protected open

space to the north. Located within a 1/2-mile radius to the west are the Whitin Pond well field, the associated Zone II described above and portions of Meadow Pond. To the north are various protected open spaces (parks) and to the southwest is a potentially productive medium yield aquifer on the far side of the Mumford River. No exposure pathway to these potential off-site receptors has been identified.

Potential on-site receptors include soil, groundwater, facility employees and visitors to the Site.

D. Federal, State and Local Permits

No Federal, State or local permits were required in order to achieve a level of No Significant Risk of harm to health, safety, public welfare and the environment as documented in this Class B-1 RAO.

E. Description of Work Completed

The conditions which meet the requirements of this Class B-1 RAO were achieved by natural attenuation of the contaminants in soil and groundwater. The work completed included assessment and monitoring of soil and groundwater.

Soil and groundwater sampling was conducted in October 1996 and January 1997 and the lab data was previously submitted to DEP in the Phase I report. The results indicated that vinyl chloride exceeded the MCP Method 1 GW-2 Cleanup Standard of 2 ug/L in M-6, M-8 and a geoprobe boring, GP-6. No exceedances were identified in soil. GW-2

The two monitoring wells noted above were resampled on 05/28/98. Vinyl chloride was not detectable in M-6 and was at 72 ug/L in M-8. Due to the remote location of M-8, more than 200 feet from any existing occupied building, the groundwater category GW-3 limit of 600 ug/L was applied and was readily met. GW-3

A confirmatory sampling round of all wells which had exceedances in the past was conducted on 08/31/98. The results met all applicable Method 1 Cleanup Standards.

Analytical results are summarized in Table 1 and monitoring well locations are shown in Figure 3.

F. Findings and Conclusions

1. Demonstration of Uncontrolled Source Elimination

The source of the release has been identified as the historic disposal of foundry wastes. The discontinuance of this former activity has eliminated the source.

2. Documentation of No Significant Risk

The objective of the assessment and monitoring at this site was to ensure that a level of No Significant Risk of harm to health, safety, public welfare and the environment exists without an Activity and Use Limitation (AUL) to maintain this permanent solution. The analytical results from assessment activities have demonstrated that the residual contaminant concentrations have been reduced to levels below the cleanup standards established by DEP without remedial actions beyond natural attenuation. Therefore, the result is a Class B-1 RAO.

In characterizing the risk posed at this site, MCP Method 1 Cleanup Standards were applied after the appropriate soil and groundwater categories were determined. Identification of the MCP Method 1 soil category is based on the accessibility of the soil (0<=3' unpaved) and on adults only being present at the industrial site. Frequency is high but intensity of use is low, so the appropriate soil category is S-2. However, in order to maintain a level of No Significant Risk without an AUL, the S-1 soil category standards must also be met. As shown in Table 1, those standards are readily met.

The Site is neither a Current or Potential Drinking Water Source Area, so no GW-1 conditions exist at the Site. The affected monitoring wells are located more than thirty (30) feet from an occupied structure, so no GW-2 condition exists. Therefore, the groundwater category is GW-3. The analytical results demonstrate that groundwater on-site readily meets the GW-3 Cleanup Standards. The laboratory reports are included as Appendix A and the results are summarized in Table 1.

The GW-3 Cleanup Standards are designed to protect surface waters such as the Mumford River, which is the sole potential pathway for off-site migration of groundwater from the Site.

3. Feasibility Evaluation

A feasibility evaluation is not required for a Class B RAO as described under 310 CMR 40.0860. Compliance with MCP Method 1 Standards for soil and groundwater constitutes by definition a level of No Significant Risk.

G. Remedial Waste

No remedial waste was generated to meet the conditions of the Class B-1 RAO at this Site.

H. Operation, Maintenance and monitoring

There is no operation, maintenance or monitoring associated with the Class B-1 RAO at this site.

I. Public Involvement

The MCP requires that the Chief Municipal Officer and the Board of Health be notified of the availability of this Class B-1 Response Action Outcome (RAO) Statement [310 CMR 40.1403(3)(f)].

A copy of the notice is contained in Appendix B.

TABLE 1

Analytical Results

Arcade Realty Trust
ATF-Davidson Property
Whitinsville, MA

RTN 2-0111

08/31/98 Compound	M-3	M-5	M-6	M-8	M-9	GW-3 Standard
PCE	ND	--	18	ND	7	5,000
TCE	1	--	2	2	3	20,000
DCE	2	--	3	90	11	50,000
VCl	7	--	ND	82	3	600
MTBE	2	--	2	ND	ND	50,000
Barium	--	4,700	--	1,800	--	30,000

05/28/98 Compound	M-6	M-8	GW-3 Standard
PCE	5	ND	5,000
TCE	ND	2	20,000
DCE	ND	64	50,000
VCl	ND	72	600
MTBE	1	ND	50,000

Notes:
All values given in ug/L (ppb).
ND = Not detected.
-- = Not sampled/analyzed.

TABLE 2

GROUNDWATER ELEVATIONS

ATF - Davidson Property
1 Main Street, Northbridge, MA

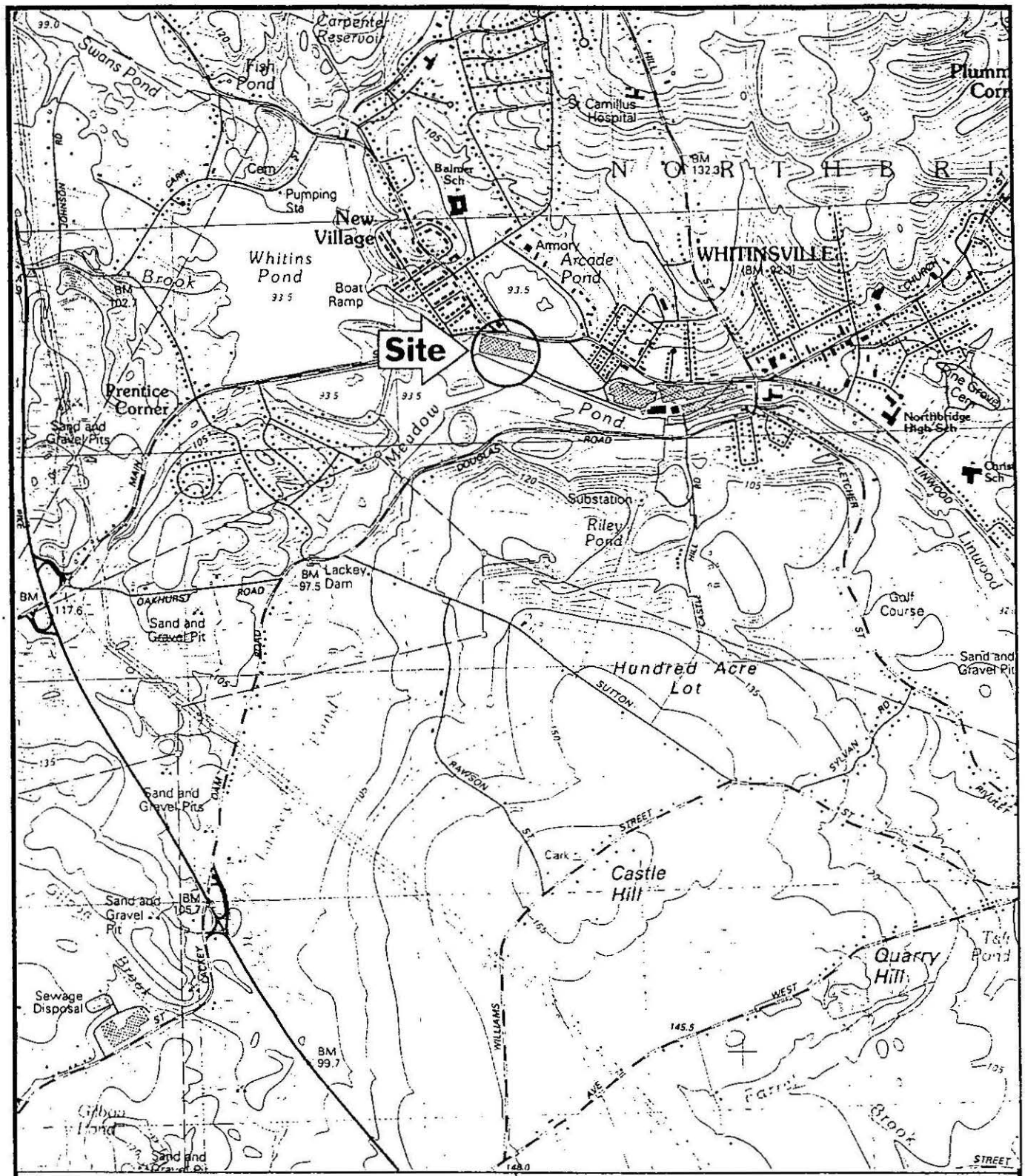
10/10/96

Well ID	Depth to Water (ft)	Stand Pipe Elev. (ft)	Groundwater Elevation (ft)
M-1	7.70	99.14	91.44
M-2	8.19	100.00	91.81
M-3	5.06	96.27	91.21
M-4	8.10	99.05	90.95
M-5	6.92	97.85	90.93
M-6	6.96	96.96	90.00
M-7	6.23	96.94	90.71
M-8	6.56	96.66	90.10
M-9	4.30	94.75[a]	90.45
M-10	4.80	95.27[a]	90.47
M-11	5.41	95.51[a]	90.10
MC-15	7.13	97.03	89.90

NOTES:

* M-2 chosen as arbitrary benchmark of 100.00 feet.
* a = Casing elevation (PVC).

20/whitinsv.gwe



REF: U.S. Geological Survey,
Uxbridge Quadrangle

KROLL ASSOCIATES, INC.
900 Third Avenue, New York, NY.

FIGURE 1
SITE LOCUS
ATF Davidson Property
1 Main Street
Northbridge, MA

Date: DEC 1998 | Scale: 1:25,000

MA DEP - Bureau of Waste Site Cleanup

Site Scoring Map: 500 feet & 0.5 Mile Radii

SITE NAME:

ATF DAVIDSON PROPERTY
1 MAIN STREET
NORTHBRIDGE, MA
4665418n 278463ew

September 13, 1996

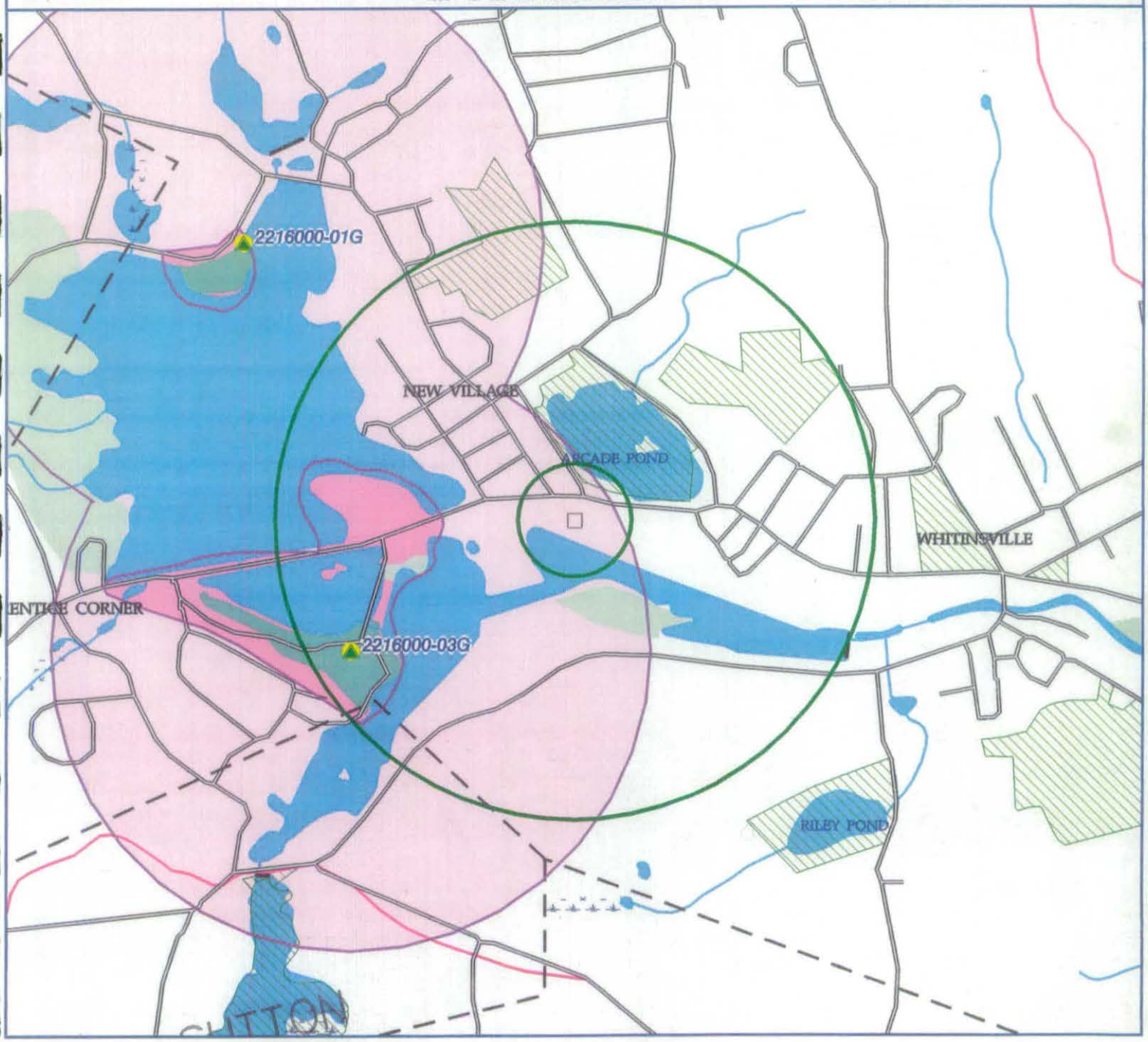
0 500 1000 FEET 2000
0 50 100 200 300 400 600 800 700 800 METERS

SCALE 1:15000

The information shown on this map is the best available at the date of printing. Please refer to the data source descriptions document.

- Potentially Productive Medium Yield Aquifer
- Potentially Productive High Yield Aquifer
- NOT Potentially Productive Medium Yield Aquifer
- NOT Potentially Productive High Yield Aquifer
- EPA Designated Sole Source Aquifers
- DEP Approved Wellhead Protection Area - ZONE 2
- Interim Wellhead Protection Area
- Public Surface Water Supply
- Lakes, Ponds, Other Fresh Water Features
- Bays, Estuaries, Other Salt Water Features
- Fresh Water Non-Forested Wetlands
- Salt Water Wetlands
- State, Federal, Municipal, Nonprofit and Private Open Space and Recreational Facilities
- Areas of Critical Environmental Concern
- DEP Permitted Solid Waste Facilities
- NHESP Estimated Habitats of Rare Wetlands Wildlife 1995 - for use with Wetlands Protection Act ONLY

- State, U.S., Interstate Routemarkers
- Interstate Highway
- U.S. Highway
- State Highway
- Other Roads
- Municipal Boundary
- County Boundary
- Train
- Powerline
- Pipeline
- Aqueduct
- Major Drainage Basin
- Sub Drainage Basin
- Zone of Contribution
- Public Water Supply - Groundwater
- Public Water Supply - Surface Water
- Non Community Public Water Supply
- Certified Vernal Pools



NRS SCORING MAP DATA SOURCES

AQUIFERS: USGS-WRD/MassGIS, 1:48,000. Automated by MassGIS from the USGS Water Resources Div. Hydrologic Atlas series manuscripts. The definitions of high and medium yield vary among basins. (1977 to 1988.)

SOLE SOURCE AQUIFERS: US EPA/MA DEP/MassGIS, various scales. They are defined by EPA as aquifers that are the 'sole or principal source' of drinking water for a given aquifer service area. Last updated July 1993.

DEP APPROVED ZONE IIS: MA DEP, 1:25,000. As stated in 310 CMR 22.02 'that area of an aquifer which contributes water to a well under the most severe pumping and recharge conditions that can be realistically anticipated.' Digitized from the DEP Water Supply Protection Atlas by DEP-DWS (Division of Water Supply) staff. (1983 to January 1995.)

POTENTIALLY PRODUCTIVE AQUIFERS: DEP-BWSC (Bureau of Waste Site Cleanup. These aquifers are defined as all medium or high yield aquifers except for that portion of the aquifers surface area that falls within a city or town that has a population density of greater than 4400 people per square mile, based on the most recent US. Census.

INTERIM WELLHEAD PROTECTION AREAS: DEP-DWS (Division of Water Supply), 1:25,000. Half-mile buffers zones were generated using the Community Public Water Supplies point coverage (see below). These polygons represent an interim Zone II for a groundwater source until an actual one is approved by the DEP Division of Water Supply. (January 1995.)

HYDROGRAPHY: USGS/MassGIS. Nearly half of the state is available as 1:24000/1:25000 USGS Digital Line Graph (DLG) data. In addition, for 40% of the state, USGS 1:100000 DLG hydrography has been enhanced with 1:25000 hydrographic features. The remainder were digitized at 1:25000 by MassGIS. Source dates vary for DLG's and USGS quadrangles.

WETLANDS: UMass Amherst RMP/MassGIS, 1:25,000. Includes nonforested wetlands extracted from the 1971-1984 Land Use datalayer which was photointerpreted from Summer CIR photography. Interpretation was not done in stereo. Also includes, in some areas, forested wetlands from USGS Digital Line Graph (DLG) data.

PROTECTED & RECREATIONAL OPEN SPACE: EOEA (Executive Office of Environmental Affairs) MassGIS, 1:25,000. Includes federal, state, county, municipal, non profit, private conservation and recreation lands and facilities. Geographic data sources are predominately town tax assessor maps and existing open space plans. Most of these maps have been recompiled onto a 1:25000 basemap provided by MASSGIS. The data are then digitized from these basemaps, which contain registration points. Ongoing updates.

ACECs: CZM and DEM, 1:25,000. Areas of Critical Environmental Concern are areas designated by the Secretary of EOEA as having a number of valuable environmental features coexisting. Projects in ACECs are subject to the highest standards of review and performance. Last updated October 1992.

ROADS: USGS/MassGIS, 1:100,000. MassGIS extracted road from the USGS Transportation DLG files. They generalized, modified, and updated this coverage. Major roads are part of the state, US. or interstate highway systems. Circa 1985.

DRAINAGE BASINS: USGS-WRD/MassGIS, 1:24,000. Automated by MassGIS from USGS Water Resources Division manuscripts with approximately 2400 sub-basins as interpreted from 1:24,000 USGS quadrangle contour lines. Individual basins for surface Community Public Water Supplies were added by DEP in April 1993. 1987 - 1993.

POLITICAL BOUNDARIES: MassGIS/USGS, 1:25,000. The datalayer was digitized by MassGIS from mylar USGS quads. Source date is approximately 1985.

QUADRANGLE INDEX: MassGIS. Generated from USGS 7 minute quadrangle corner coordinates converted from lat/long to Mass. State Plane coordinates. 1985.

DEP PERMITTED SOLID WASTE FACILITIES: DEP-DSW (Division of Solid Waste), 1:25,000. Includes only facilities regulated since 1971. Most are sanitary landfills, though transfer stations and recycling or composting facilities are included. Either facility boundaries were compiled or approximate facility point locations drafted onto USGS quadrangles and automated by the DEP Division of Solid Waste. Last updated 1994.

PUBLIC WATER SUPPLIES: DEP-DWS, 1:25,000. Community and non-community surface and groundwater withdrawal points were field collected using Global Positioning System receivers. The attributes were added from the DEP Division of Water Supply database. Last updated January 1995.

SITE LOCATION: Location coordinates were converted to state plane coordinates from user supplied longitude and latitude or UTM. Coordinates are site specific and source dates vary.

NHESP Estimated Habitats of Rare Wetlands Wildlife: Polygons show estimated habitats for all processed occurrences of rare wetlands wildlife. Data collected by Natural Heritage & Endangered Species Program and compiled at 1:24000 or 1:25000 scale. For use with Wetlands Protection Act Only. Effective Jan. 1, 1995 through Dec. 31 1995.

NHESP Certified Vernal Pools: Points show all vernal pools certified by NHESP/MADFW (Fisheries and Wildlife) as of January 1, 1993. Data compiled at 1:24000 or 1:25000 scale. Effective January 1, 1995 through December 31, 1995

Last Revised FEBRUARY 6, 1995

KROLL ASSOCIATES, INC.
900 Third Avenue, New York, NY.

FIGURE 3
SITE PLAN
ATF Davidson Property
1 Main Street
Northbridge, MA

Rev: DEC 1998

NOTE: GROUNDWATER ELEVATIONS BASED ON MEASUREMENTS TAKEN ON 10/10/96.

RECEIVED
DEC 18 1998

FOR REGISTRY USE ONLY

I CERTIFY THAT I HAVE CONFORMED WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS IN PREPARING THIS PLAN.

N

W E

MAIN STREET

FLOW

91.5'

91.0'

90.5'

90.0'

1-Story Masonry & Steel Building

BUILDING ADDITION

32.466 Acres ±

14.00 Acre Leased Lot)

WATER

OAK ST.

WEST STREET

RIVER

MUMFORD RIVER

4,341.23's Among River Line

DOUGLAS ROAD

Arcade Property

FRANK G. SPROTT

WILLIAM T. & FRANCES L. MCGEE

WALTER B. & EILEEN H. LISAF

JOSEPH J. LENTINI

NORMAN L. & FLORENCE M. LIGHTOWN

JAMES W. & MARY BETH GORDON

DANIEL J. NEWTH

DONALD BLOOM

SIDNEY COUCH as Trustee of Wallaville Redevelopment Trust

PLAN OF LAND
FOR
WHITE CONSOLIDATED INDUSTRIES, INC.
AND/OR
ATF-DAVIDSON COMPANY, INC.
NORTHBRIDGE, MASS.
DECEMBER, 1984

0 100' 200' 300'
SCALE

ASSESSORS PLAT 2 LOTS 36-37-38 & 39
ZONED: INDUSTRIAL

APPROVAL UNDER THE SUBDIVISION CONTROL LAW NOT REQUIRED.
TOWN OF NORTHBRIDGE PLANNING BOARD:

_____ BEING A MAJORITY

DATE _____

BBEAULT AND FLORENTZ ENGINEERING CO.
CIVIL ENGINEERS AND LAND SURVEYORS
99 MAIN STREET, WOONSOCKET, R.I.

APPENDIX A

Laboratory Reports

Committed To *Your* Success

Severn Trent Laboratories
149 Rangeway Road
North Billerica MA 01862

Tel: (978) 667-1400
Fax: (978) 667-7871

Mr. Don Corey
Phoenix Environmental
P.O. Box 276
Bedford, MA 01730

September 14, 1998

Dear Mr. Corey:

Please find enclosed the analytical results of the sample(s) received at our laboratory on September 01, 1998. This report contains sections addressing the following information at a minimum:

- sample ID correspondence table
- analytical results
- chain-of-custody (if applicable)
- definitions of data qualifiers and terminology

Client Project #	N/A	**Client Project Name**	ATF Davidson Whitinsville
STL Report #	P116-173	**Purchase Order #**	8-31-98

Copies of this analytical report and supporting data are maintained in our files for a minimum of 3 years unless special arrangements are made. Unless specifically indicated, all analytical testing was performed at the Billerica, Massachusetts STL laboratory.

We appreciate your selection of our services and welcome any questions or suggestions you may have relative to this report. Please contact your customer service representative at (978) 667-1400 for any additional information. Thank you for utilizing our services and we hope you will consider us for your future analytical needs.

I have reviewed and approved the enclosed data for final release.

Sincerely,

Robert Leary

for: Michael F. Wheeler, Ph.D.
Laboratory Director

Severn Trent Laboratories
MA-DEP #MA038

MW/dib

h:\reports\forms\dconwin\rpf00101.ma 9/24/98, 11:48 am

Sample ID Correspondence Table

Client Sample ID	STL Sample ID
M-3	P116-173-01
M-5	P116-173-02
M-6	P116-173-03
M-8	P116-173-04
M-9	P116-173-05

Definitions of Data Qualifiers and Terminology

A number of data qualifiers are widely used within the environmental testing industry and may be utilized in our data reports. The following definitions of these qualifiers are included as a service to our clientele. The majority of the qualifiers have evolved from the EPA contract laboratory program (CLP).

B - This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to use caution when applying the results of this analyte.

BQL - Below Quantitation Limit indicates the compound was not detected in the sample above the practical quantitation limit.

D - Indicates the compound was diluted below the calibration range.

E - Indicates that the concentration of the specific compound exceeded the calibration range of the instrument for that particular analysis.

J - Indicates an estimated value. The compound is determined to be present in the sample based on GC/MS criteria, but the amount is less than the sample quantitation limit. STL - MA GC/MS reports do not typically report J - marked results. If requested, J - marked results are provided and the report flagged to verify that the data was appropriately reviewed.

MDL - The method detection limit is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero.

NA - Not applicable or not available.

ND - Indicates the compound or analyte was not detected in the sample above the method detection limit or the practical quantitation limit for the particular analysis.

PQL - The practical quantitation limit is the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine operating conditions.

Inorganics Analysis Data Sheet

Client ID : M-5
Client Name : Severn Trent Laboratories
Project Name : P116-173
Matrix : Water

Report No : 12731
STE Sample Number : 109661
Date Collected : 08/31/98
Date Received: 09/01/98

CAS NO	Analyte	Result	Units	Method	Date Analyzed
7440-39-3	Barium	4700	ug/L	EPA 200.7	09/18/98

Inorganics Analysis Data Sheet

Client ID : M-8
Client Name : Severn Trent Laboratories
Project Name : P116-173
Matrix : Water

Report No : 12731
STE Sample Number : 109662
Date Collected : 08/31/98
Date Received: 09/01/98

CAS NO	Analyte	Result	Units	Method	Date Analyzed
7440-39-3	Barium	1800	ug/L	EPA 200.7	09/18/98

53 Southampton Road
Westfield, MA 01085
Tel: (413) 572-4000
Fax: (413) 572-3707

Job No.: 12731
Project No.: P116-173
Compound: Barium
Date Collected: 08/31/98

SAMPLE ID	DL µg/L
M-5	10
M-8	10

STL - Massachusetts
Analysis Report: EPA Method 8260B

Client:	Phoenix Environmental	STL ID:	P116-173-01
Project:	ATF Davidson Whitinsville	Sample:	M-3
Report Date:	09/11/98	Type:	Water
Collected:	08/31/98	Container:	VOA
Received:	09/01/98		
Analyzed:	09/09/98	Dilution Factor:	1
By:	DB		

Number	Priority Pollutant Compounds	PQL (ug/L)	Result (ug/L)
1	Benzene	1	BQL
2	Bromodichloromethane	1	BQL
3	Bromoform	1	BQL
4	Bromomethane	2	BQL
5	Carbon tetrachloride	1	BQL
6	Chlorobenzene	1	BQL
7	Chloroethane	2	BQL
8	2-Chloroethylvinyl ether	1	BQL
9	Chloroform	1	BQL
10	Chloromethane	2	BQL
11	Dibromochloromethane	1	BQL
12	1,2-Dichlorobenzene	1	BQL
13	1,3-Dichlorobenzene	1	BQL
14	1,4-Dichlorobenzene	1	BQL
15	1,1-Dichloroethane	1	BQL
16	1,2-Dichloroethane	1	BQL
17	1,1-Dichloroethene	1	BQL
18	cis-1,2-Dichloroethene	1	2
19	trans-1,2-Dichloroethene	1	BQL
20	1,2-Dichloropropane	1	BQL
21	cis-1,3-Dichloropropene	0.5	BQL
22	trans-1,3-Dichloropropene	0.5	BQL
23	Ethylbenzene	1	BQL
24	Methylene chloride	1	BQL
25	1,1,2,2-Tetrachloroethane	1	BQL
26	Tetrachloroethene	1	BQL
27	Toluene	1	BQL
28	1,1,1-Trichloroethane	1	BQL
29	1,1,2-Trichloroethane	1	BQL
30	Trichloroethene	1	1
31	Trichlorofluoromethane	1	BQL
32	Vinyl chloride	2	7

STL - Massachusetts
Analysis Report: EPA Method 8260B

Client:	Phoenix Environmental	STL ID:	P116-173-01
Project:	ATF Davidson Whitinsville	Sample:	M-3

	Other TCL Compounds:	PQL (ug/L)	Result (ug/L)	
33	Acetone	20	BQL	
34	2-Butanone	20	BQL	
35	n-Butylbenzene	1	BQL	
36	s-Butylbenzene	1	BQL	
37	t-Butylbenzene	1	BQL	
38	Carbon disulfide	1	BQL	
39	2-Chlorotoluene	1	BQL	
40	4-Chlorotoluene	1	BQL	
41	1,2-Dibromoethane	1	BQL	
42	2-Hexanone	10	BQL	
43	Hexachlorobutadiene	0.6	BQL	
44	Isopropylbenzene	1	BQL	
45	p-Isopropyltoluene	1	BQL	
46	4-Methyl-2-pentanone	10	BQL	
47	Methyl-t-butyl ether	1		2
48	Naphthalene	10	BQL	
49	n-Propylbenzene	1	BQL	
50	Styrene	1	BQL	
51	1,1,1,2-Tetrachloroethane	1	BQL	
52	1,2,3-Trichlorobenzene	1	BQL	
53	1,2,4-Trichlorobenzene	1	BQL	
54	1,2,4-Trimethylbenzene	1	BQL	
55	1,3,5-Trimethlybenzene	1	BQL	
56	Vinyl acetate	10	BQL	
57	Xylenes	1	BQL	

Surrogate Standard Recovery:

1,2-Dichloroethane-d4	109	%
Toluene-d8	105	%
Bromofluorobenzene	102	%

Comments:
PQL = Practical quantitation limit.
BQL = Below quantitation limit.

STL - Massachusetts
Analysis Report: EPA Method 8260B

Client:	Phoenix Environmental	STL ID:	P116-173-03
Project:	ATF Davidson Whitinsville	Sample:	M-6
Report Date:	09/11/98	Type:	Water
Collected:	08/31/98	Container:	VOA
Received:	09/01/98		
Analyzed:	09/09/98	Dilution Factor:	1
By:	DB		

Number	Priority Pollutant Compounds	PQL (ug/L)	Result (ug/L)
1	Benzene	1	BQL
2	Bromodichloromethane	1	BQL
3	Bromoform	1	BQL
4	Bromomethane	2	BQL
5	Carbon tetrachloride	1	BQL
6	Chlorobenzene	1	BQL
7	Chloroethane	2	BQL
8	2-Chloroethylvinyl ether	1	BQL
9	Chloroform	1	BQL
10	Chloromethane	2	BQL
11	Dibromochloromethane	1	BQL
12	1,2-Dichlorobenzene	1	BQL
13	1,3-Dichlorobenzene	1	BQL
14	1,4-Dichlorobenzene	1	BQL
15	1,1-Dichloroethane	1	BQL
16	1,2-Dichloroethane	1	BQL
17	1,1-Dichloroethene	1	BQL
18	cis-1,2-Dichloroethene	1	3
19	trans-1,2-Dichloroethene	1	BQL
20	1,2-Dichloropropane	1	BQL
21	cis-1,3-Dichloropropene	0.5	BQL
22	trans-1,3-Dichloropropene	0.5	BQL
23	Ethylbenzene	1	BQL
24	Methylene chloride	1	BQL
25	1,1,2,2-Tetrachloroethane	1	BQL
26	Tetrachloroethene	1	18
27	Toluene	1	BQL
28	1,1,1-Trichloroethane	1	BQL
29	1,1,2-Trichloroethane	1	BQL
30	Trichloroethene	1	2
31	Trichlorofluoromethane	1	BQL
32	Vinyl chloride	2	BQL

STL - Massachusetts
Analysis Report: EPA Method 8260B

Client:	Phoenix Environmental	STL ID:	P116-173-03
Project:	ATF Davidson Whitinsville	Sample:	M-6

	Other TCL Compounds:	PQL (ug/L)	Result (ug/L)
33	Acetone	20	BQL
34	2-Butanone	20	BQL
35	n-Butylbenzene	1	BQL
36	s-Butylbenzene	1	BQL
37	t-Butylbenzene	1	BQL
38	Carbon disulfide	1	BQL
39	2-Chlorotoluene	1	BQL
40	4-Chlorotoluene	1	BQL
41	1,2-Dibromoethane	1	BQL
42	2-Hexanone	10	BQL
43	Hexachlorobutadiene	0.6	BQL
44	Isopropylbenzene	1	BQL
45	p-Isopropyltoluene	1	BQL
46	4-Methyl-2-pentanone	10	BQL
47	Methyl-t-butyl ether	1	2
48	Naphthalene	10	BQL
49	n-Propylbenzene	1	BQL
50	Styrene	1	BQL
51	1,1,1,2-Tetrachloroethane	1	BQL
52	1,2,3-Trichlorobenzene	1	BQL
53	1,2,4-Trichlorobenzene	1	BQL
54	1,2,4-Trimethylbenzene	1	BQL
55	1,3,5-Trimethlybenzene	1	BQL
56	Vinyl acetate	10	BQL
57	Xylenes	1	BQL

Surrogate Standard Recovery:

1,2-Dichloroethane-d4	101	%
Toluene-d8	106	%
Bromofluorobenzene	97	%

Comments:
PQL = Practical quantitation limit.
BQL = Below quantitation limit.

STL - Massachusetts
Analysis Report: EPA Method 8260B

Client:	Phoenix Environmental	STL ID:	P116-173-04
Project:	ATF Davidson Whitinsville	Sample:	M-8
Report Date:	09/11/98	Type:	Water
Collected:	08/31/98	Container:	VOA
Received:	09/01/98		
Analyzed:	09/09/98	Dilution Factor:	2
By:	DB		

Number	Priority Pollutant Compounds	PQL (ug/L)	Result (ug/L)
1	Benzene	2	BQL
2	Bromodichloromethane	2	BQL
3	Bromoform	2	BQL
4	Bromomethane	4	BQL
5	Carbon tetrachloride	2	BQL
6	Chlorobenzene	2	BQL
7	Chloroethane	4	BQL
8	2-Chloroethylvinyl ether	2	BQL
9	Chloroform	2	BQL
10	Chloromethane	4	BQL
11	Dibromochloromethane	2	BQL
12	1,2-Dichlorobenzene	2	BQL
13	1,3-Dichlorobenzene	2	BQL
14	1,4-Dichlorobenzene	2	BQL
15	1,1-Dichloroethane	2	BQL
16	1,2-Dichloroethane	2	BQL
17	1,1-Dichloroethene	2	BQL
18	cis-1,2-Dichloroethene	2	86
19	trans-1,2-Dichloroethene	2	4
20	1,2-Dichloropropane	2	BQL
21	cis-1,3-Dichloropropene	1	BQL
22	trans-1,3-Dichloropropene	1	BQL
23	Ethylbenzene	2	BQL
24	Methylene chloride	2	2B
25	1,1,2,2-Tetrachloroethane	2	BQL
26	Tetrachloroethene	2	BQL
27	Toluene	2	BQL
28	1,1,1-Trichloroethane	2	BQL
29	1,1,2-Trichloroethane	2	BQL
30	Trichloroethene	2	2
31	Trichlorofluoromethane	2	BQL
32	Vinyl chloride	4	82

STL - Massachusetts
Analysis Report: EPA Method 8260B

Client:	Phoenix Environmental	STL ID:	P116-173-04
Project:	ATF Davidson Whitinsville	Sample:	M-8

	Other TCL Compounds:	PQL (ug/L)	Result (ug/L)
33	Acetone	40	BQL
34	2-Butanone	40	BQL
35	n-Butylbenzene	2	BQL
36	s-Butylbenzene	2	BQL
37	t-Butylbenzene	2	BQL
38	Carbon disulfide	2	BQL
39	2-Chlorotoluene	2	BQL
40	4-Chlorotoluene	2	BQL
41	1,2-Dibromoethane	2	BQL
42	2-Hexanone	20	BQL
43	Hexachlorobutadiene	1.2	BQL
44	Isopropylbenzene	2	BQL
45	p-Isopropyltoluene	2	BQL
46	4-Methyl-2-pentanone	20	BQL
47	Methyl-t-butyl ether	2	BQL
48	Naphthalene	20	BQL
49	n-Propylbenzene	2	BQL
50	Styrene	2	BQL
51	1,1,1,2-Tetrachloroethane	2	BQL
52	1,2,3-Trichlorobenzene	2	BQL
53	1,2,4-Trichlorobenzene	2	BQL
54	1,2,4-Trimethylbenzene	2	BQL
55	1,3,5-Trimethlybenzene	2	BQL
56	Vinyl acetate	20	BQL
57	Xylenes	2	BQL

Surrogate Standard Recovery:

1,2-Dichloroethane-d4	104	%
Toluene-d8	105	%
Bromofluorobenzene	92	%

Comments:

PQL = Practical quantitation limit.
BQL = Below quantitation limit.
Quantitation limit elevated due to sample dilution prior to analysis.
Sample diluted due to high concentration of target compounds present.
B = Compound in blank

STL - Massachusetts
Analysis Report: EPA Method 8260B

Client:	Phoenix Environmental	STL ID:	P116-173-05
Project:	ATF Davidson Whitinsville	Sample:	M-9
Report Date:	09/11/98	Type:	Water
Collected:	08/31/98	Container:	VOA
Received:	09/01/98		
Analyzed:	09/09/98	Dilution Factor:	1
By:	DB		

Number	Priority Pollutant Compounds	PQL (ug/L)	Result (ug/L)
1	Benzene	1	BQL
2	Bromodichloromethane	1	BQL
3	Bromoform	1	BQL
4	Bromomethane	2	BQL
5	Carbon tetrachloride	1	BQL
6	Chlorobenzene	1	BQL
7	Chloroethane	2	BQL
8	2-Chloroethylvinyl ether	1	BQL
9	Chloroform	1	BQL
10	Chloromethane	2	BQL
11	Dibromochloromethane	1	BQL
12	1,2-Dichlorobenzene	1	BQL
13	1,3-Dichlorobenzene	1	BQL
14	1,4-Dichlorobenzene	1	BQL
15	1,1-Dichloroethane	1	BQL
16	1,2-Dichloroethane	1	BQL
17	1,1-Dichloroethene	1	BQL
18	cis-1,2-Dichloroethene	1	11
19	trans-1,2-Dichloroethene	1	BQL
20	1,2-Dichloropropane	1	BQL
21	cis-1,3-Dichloropropene	0.5	BQL
22	trans-1,3-Dichloropropene	0.5	BQL
23	Ethylbenzene	1	BQL
24	Methylene chloride	1	BQL
25	1,1,2,2-Tetrachloroethane	1	BQL
26	Tetrachloroethene	1	7
27	Toluene	1	BQL
28	1,1,1-Trichloroethane	1	BQL
29	1,1,2-Trichloroethane	1	BQL
30	Trichloroethene	1	3
31	Trichlorofluoromethane	1	BQL
32	Vinyl chloride	2	3

STL - Massachusetts
Analysis Report: EPA Method 8260B

Client:	Phoenix Environmental	STL ID:	P116-173-05
Project:	ATF Davidson Whitinsville	Sample:	M-9

	Other TCL Compounds:	PQL (ug/L)	Result (ug/L)
33	Acetone	20	BQL
34	2-Butanone	20	BQL
35	n-Butylbenzene	1	BQL
36	s-Butylbenzene	1	BQL
37	t-Butylbenzene	1	BQL
38	Carbon disulfide	1	BQL
39	2-Chlorotoluene	1	BQL
40	4-Chlorotoluene	1	BQL
41	1,2-Dibromoethane	1	BQL
42	2-Hexanone	10	BQL
43	Hexachlorobutadiene	0.6	BQL
44	Isopropylbenzene	1	BQL
45	p-Isopropyltoluene	1	BQL
46	4-Methyl-2-pentanone	10	BQL
47	Methyl-t-butyl ether	1	BQL
48	Naphthalene	10	BQL
49	n-Propylbenzene	1	BQL
50	Styrene	1	BQL
51	1,1,1,2-Tetrachloroethane	1	BQL
52	1,2,3-Trichlorobenzene	1	BQL
53	1,2,4-Trichlorobenzene	1	BQL
54	1,2,4-Trimethylbenzene	1	BQL
55	1,3,5-Trimethlybenzene	1	BQL
56	Vinyl acetate	10	BQL
57	Xylenes	1	BQL

Surrogate Standard Recovery:

1,2-Dichloroethane-d4	108	%
Toluene-d8	106	%
Bromofluorobenzene	85	%

Comments:
PQL = Practical quantitation limit.
BQL = Below quantitation limit.

STL - Massachusetts
Analysis Report: EPA Method 8260B

Client:		STL ID:	Method Blank
Project:		Sample:	
Report Date:	09/11/98	Type:	Water
Collected:		Container:	
Received:			
Analyzed:	09/09/98	Dilution Factor:	1
By:	DB		

Number	Priority Pollutant Compounds	PQL (ug/L)	Result (ug/L)
1	Benzene	1	BQL
2	Bromodichloromethane	1	BQL
3	Bromoform	1	BQL
4	Bromomethane	2	BQL
5	Carbon tetrachloride	1	BQL
6	Chlorobenzene	1	BQL
7	Chloroethane	2	BQL
8	2-Chloroethylvinyl ether	1	BQL
9	Chloroform	1	BQL
10	Chloromethane	2	BQL
11	Dibromochloromethane	1	BQL
12	1,2-Dichlorobenzene	1	BQL
13	1,3-Dichlorobenzene	1	BQL
14	1,4-Dichlorobenzene	1	BQL
15	1,1-Dichloroethane	1	BQL
16	1,2-Dichloroethane	1	BQL
17	1,1-Dichloroethene	1	BQL
18	cis-1,2-Dichloroethene	1	BQL
19	trans-1,2-Dichloroethene	1	BQL
20	1,2-Dichloropropane	1	BQL
21	cis-1,3-Dichloropropene	0.5	BQL
22	trans-1,3-Dichloropropene	0.5	BQL
23	Ethylbenzene	1	BQL
24	Methylene chloride	1	1
25	1,1,2,2-Tetrachloroethane	1	BQL
26	Tetrachloroethene	1	BQL
27	Toluene	1	BQL
28	1,1,1-Trichloroethane	1	BQL
29	1,1,2-Trichloroethane	1	BQL
30	Trichloroethene	1	BQL
31	Trichlorofluoromethane	1	BQL
32	Vinyl chloride	2	BQL

STL - Massachusetts
Analysis Report: EPA Method 8260B

Client:
Project:

STL ID: Method Blank
Sample:

	Other TCL Compounds:	PQL (ug/L)	Result (ug/L)
33	Acetone	20	BQL
34	2-Butanone	20	BQL
35	n-Butylbenzene	1	BQL
36	s-Butylbenzene	1	BQL
37	t-Butylbenzene	1	BQL
38	Carbon disulfide	1	BQL
39	2-Chlorotoluene	1	BQL
40	4-Chlorotoluene	1	BQL
41	1,2-Dibromoethane	1	BQL
42	2-Hexanone	10	BQL
43	Hexachlorobutadiene	0.6	BQL
44	Isopropylbenzene	1	BQL
45	p-Isopropyltoluene	1	BQL
46	4-Methyl-2-pentanone	10	BQL
47	Methyl-t-butyl ether	1	BQL
48	Naphthalene	10	BQL
49	n-Propylbenzene	1	BQL
50	Styrene	1	BQL
51	1,1,1,2-Tetrachloroethane	1	BQL
52	1,2,3-Trichlorobenzene	1	BQL
53	1,2,4-Trichlorobenzene	1	BQL
54	1,2,4-Trimethylbenzene	1	BQL
55	1,3,5-Trimethlybenzene	1	BQL
56	Vinyl acetate	10	BQL
57	Xylenes	1	BQL

Surrogate Standard Recovery:

1,2-Dichloroethane-d4	110	%
Toluene-d8	105	%
Bromofluorobenzene	91	%

Comments:
PQL = Practical quantitation limit.
BQL = Below quantitation limit.
Corresponding Samples: P116-173-01, -03, -04, -05.

American Environmental Network, Inc.
149 Rangeway Road
N. Billerica, Massachusetts 01862
978/667-1400
Fax 978/667-7871

CHAIN OF CUSTODY RECORD

REQ

CUST. P.O. #	8-31-98
AEN QUOTE #	

REGULATORY CLASSIFICATION - PLEASE SPECIFY

☐ NPDES ☐ DRINKING WATER ☒ MCP GW1 ☐ MCP OTHER ____
☐ RCRA ☐ NIOSH ☐ OTHER ____

TURN AROUND

☐ 15 BUSINESS DAY
☒ 10 BUSINESS DAY
☐ RUSH ____
☐ OTHER ____

COMPANY	CONTACT PERSON	PROJECT I.D.	PHONE #	FAX #
PHOENIX ENV. SERV., INC.	DOUG COREY	ATF DAVIDSON WHITINSVILLE	781 275-2970	781 275-3557

ADDRESS	CITY	STATE	ZIP
P.O. BOX 276	BEDFORD	MA	01730

DATE	TIME	SAMPLE I.D.	MATRIX	CONTAINER TYPE	# OF CONTAINERS	PRESERVATIVES	REQUESTED PARAMETERS: 8260	T. BARIUM	(COMMENTS)
8/31/98	15:00	M-3	W	V	3	HCl	X		
	15:15	M-5		250 ML P	1	–		X	
	15:30	M-6		V	3	HCl	X		
	15:45	M-8		V/250 ML	3/1	HCl/–	X	X	
	16:00	M-9		V	3	HCl	X		

SAMPLED BY: DOUGLAS COREY (PRINT NAME) Douglas M. Corey (SIGNATURE)

RELINQUISHED BY (SIGNATURE)	DATE / TIME	RECEIVED BY	DATE / TIME
Douglas M. Corey	9/01/98 9:40 AM		9/01/98 9:[illegible]
RELINQUISHED BY (SIGNATURE)	DATE / TIME	RECEIVED FOR LAB BY	DATE / TIME

AEN USE ONLY

FIELD REMARKS

American Environmental Network
149 Rangeway Road • N. Billerica, MA 01862 • (978) 667-1400 • Fax (978) 667-7871

Mr. Don Corey
Phoenix Environmental
P.O. Box 276
Bedford, MA 01730

June 5, 1998

Dear Mr. Corey:

Please find enclosed the analytical results of the sample(s) received at our laboratory on May 28, 1998. This report contains sections addressing the following information at a minimum:

- sample ID correspondence table
- analytical results
- chain-of-custody (if applicable)
- definitions of data qualifiers and terminology

Client Project #	N/A	**Client Project Name**	ATF-Davidson Whitinsville
IEA Report #	P116-167	**Purchase Order #**	05-28-98

Copies of this analytical report and supporting data are maintained in our files for a minimum of 3 years unless special arrangements are made. Unless specifically indicated, all analytical testing was performed at the IEA-Massachusetts laboratory.

We appreciate your selection of our services and welcome any questions or suggestions you may have relative to this report. Please contact your customer service representative at (978) 667-1400 for any additional information. Thank you for utilizing our services and we hope you will consider us for your future analytical needs.

I have reviewed and approved the enclosed data for final release.

Sincerely,

Michael F. Wheeler, Ph.D.
Laboratory Director

IEA/American Environmental Network (MA)
MA-DEP #MA038

MW/dib

h:\reports\forms\dconwin\rpf00101.ma

6/5/98, 1:08 pm

Sample ID Correspondence Table

Client Sample ID	IEA Sample ID
MW-6	P116-167-01
MW-8	P116-167-02

Definitions of Data Qualifiers and Terminology

A number of data qualifiers are widely used within the environmental testing industry and may be utilized in our data reports. The following definitions of these qualifiers are included as a service to our clientele. The majority of the qualifiers have evolved from the EPA contract laboratory program (CLP).

B - This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to use caution when applying the results of this analyte.

BQL - Below Quantitation Limit indicates the compound was not detected in the sample above the practical quantitation limit.

D - Indicates the compound was diluted below the calibration range.

E - Indicates that the concentration of the specific compound exceeded the calibration range of the instrument for that particular analysis.

J - Indicates an estimated value. The compound is determined to be present in the sample based on GC/MS criteria, but the amount is less than the sample quantitation limit. IEA - MA GC/MS reports do not typically report J - marked results. If requested, J - marked results are provided and the report flagged to verify that the data was appropriately reviewed.

MDL - The method detection limit is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero.

NA - Not applicable or not available.

ND - Indicates the compound or analyte was not detected in the sample above the method detection limit or the practical quantitation limit for the particular analysis.

PQL - The practical quantitation limit is the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine operating conditions.

AEN - Massachusetts
Analysis Report: EPA Method 8260B

Client:	Phoenix Environmental	AEN ID:	P116-167-01
Project:	ATF-Davidson Whittinsville	Sample:	MW-6
Report Date:	06/04/98	Type:	Water
Collected:	05/28/98	Container:	VOA
Received:	05/28/98		
Analyzed:	06/02/98	Dilution Factor:	1
By:	DB		

Number	Priority Pollutant Compounds	PQL (ug/L)	Result (ug/L)
1	Benzene	1	BQL
2	Bromodichloromethane	1	BQL
3	Bromoform	1	BQL
4	Bromomethane	2	BQL
5	Carbon tetrachloride	1	BQL
6	Chlorobenzene	1	BQL
7	Chloroethane	2	BQL
8	2-Chloroethylvinyl ether	1	BQL
9	Chloroform	1	BQL
10	Chloromethane	2	BQL
11	Dibromochloromethane	1	BQL
12	1,2-Dichlorobenzene	1	BQL
13	1,3-Dichlorobenzene	1	BQL
14	1,4-Dichlorobenzene	1	BQL
15	1,1-Dichloroethane	1	BQL
16	1,2-Dichloroethane	1	BQL
17	1,1-Dichloroethene	1	BQL
18	cis-1,2-Dichloroethene	1	BQL
19	trans-1,2-Dichloroethene	1	BQL
20	1,2-Dichloropropane	1	BQL
21	cis-1,3-Dichloropropene	0.5	BQL
22	trans-1,3-Dichloropropene	0.5	BQL
23	Ethylbenzene	1	BQL
24	Methylene chloride	1	BQL
25	1,1,2,2-Tetrachloroethane	1	BQL
26	Tetrachloroethene	1	5
27	Toluene	1	BQL
28	1,1,1-Trichloroethane	1	BQL
29	1,1,2-Trichloroethane	1	BQL
30	Trichloroethene	1	BQL
31	Trichlorofluoromethane	1	BQL
32	Vinyl chloride	2	BQL

AEN - Massachusetts
Analysis Report: EPA Method 8260B

Client:	Phoenix Environmental	AEN ID:	P116-167-01
Project:	ATF-Davidson Whittinsville	Sample:	MW-6

	Other TCL Compounds:	PQL (ug/L)	Result (ug/L)
33	Acetone	20	BQL
34	2-Butanone	20	BQL
35	n-Butylbenzene	1	BQL
36	s-Butylbenzene	1	BQL
37	t-Butylbenzene	1	BQL
38	Carbon disulfide	1	BQL
39	2-Chlorotoluene	1	BQL
40	4-Chlorotoluene	1	BQL
41	1,2-Dibromoethane	1	BQL
42	2-Hexanone	10	BQL
43	Hexachlorobutadiene	0.6	BQL
44	Isopropylbenzene	1	BQL
45	p-Isopropyltoluene	1	BQL
46	4-Methyl-2-pentanone	10	BQL
47	Methyl-t-butyl ether	1	1
48	Naphthalene	10	BQL
49	n-Propylbenzene	1	BQL
50	Styrene	1	BQL
51	1,1,1,2-Tetrachloroethane	1	BQL
52	1,2,3-Trichlorobenzene	1	BQL
53	1,2,4-Trichlorobenzene	1	BQL
54	1,2,4-Trimethylbenzene	1	BQL
55	1,3,5-Trimethlybenzene	1	BQL
56	Vinyl acetate	10	BQL
57	Xylenes	1	BQL

Surrogate Standard Recovery:

1,2-Dichloroethane-d4	86	%
Toluene-d8	95	%
Bromofluorobenzene	99	%

Comments:
PQL = Practical quantitation limit.
BQL = Below quantitation limit.

AEN - Massachusetts
Analysis Report: EPA Method 8260B

Client:	Phoenix Environmental	AEN ID:	P116-167-02
Project:	ATF-Davidson Whittinsville	Sample:	MW-8
Report Date:	06/04/98	Type:	Water
Collected:	05/28/98	Container:	VOA
Received:	05/28/98		
Analyzed:	06/02/98	Dilution Factor:	2
By:	DB		

Number	Priority Pollutant Compounds	PQL (ug/L)	Result (ug/L)
1	Benzene	2	BQL
2	Bromodichloromethane	2	BQL
3	Bromoform	2	BQL
4	Bromomethane	4	BQL
5	Carbon tetrachloride	2	BQL
6	Chlorobenzene	2	BQL
7	Chloroethane	4	BQL
8	2-Chloroethylvinyl ether	2	BQL
9	Chloroform	2	BQL
10	Chloromethane	4	BQL
11	Dibromochloromethane	2	BQL
12	1,2-Dichlorobenzene	2	BQL
13	1,3-Dichlorobenzene	2	BQL
14	1,4-Dichlorobenzene	2	BQL
15	1,1-Dichloroethane	2	BQL
16	1,2-Dichloroethane	2	BQL
17	1,1-Dichloroethene	2	BQL
18	cis-1,2-Dichloroethene	2	60
19	trans-1,2-Dichloroethene	2	4
20	1,2-Dichloropropane	2	BQL
21	cis-1,3-Dichloropropene	1	BQL
22	trans-1,3-Dichloropropene	1	BQL
23	Ethylbenzene	2	BQL
24	Methylene chloride	2	BQL
25	1,1,2,2-Tetrachloroethane	2	BQL
26	Tetrachloroethene	2	BQL
27	Toluene	2	BQL
28	1,1,1-Trichloroethane	2	BQL
29	1,1,2-Trichloroethane	2	BQL
30	Trichloroethene	2	2
31	Trichlorofluoromethane	2	BQL
32	Vinyl chloride	4	72

AEN - Massachusetts
Analysis Report: EPA Method 8260B

Client:	Phoenix Environmental	AEN ID:	P116-167-02
Project:	ATF-Davidson Whittinsville	Sample:	MW-8

	Other TCL Compounds:	PQL (ug/L)	Result (ug/L)
33	Acetone	40	BQL
34	2-Butanone	40	BQL
35	n-Butylbenzene	2	BQL
36	s-Butylbenzene	2	BQL
37	t-Butylbenzene	2	BQL
38	Carbon disulfide	2	BQL
39	2-Chlorotoluene	2	BQL
40	4-Chlorotoluene	2	BQL
41	1,2-Dibromoethane	2	BQL
42	2-Hexanone	20	BQL
43	Hexachlorobutadiene	1.2	BQL
44	Isopropylbenzene	2	BQL
45	p-Isopropyltoluene	2	BQL
46	4-Methyl-2-pentanone	20	BQL
47	Methyl-t-butyl ether	2	BQL
48	Naphthalene	20	BQL
49	n-Propylbenzene	2	BQL
50	Styrene	2	BQL
51	1,1,1,2-Tetrachloroethane	2	BQL
52	1,2,3-Trichlorobenzene	2	BQL
53	1,2,4-Trichlorobenzene	2	BQL
54	1,2,4-Trimethylbenzene	2	BQL
55	1,3,5-Trimethlybenzene	2	BQL
56	Vinyl acetate	20	BQL
57	Xylenes	2	BQL

Surrogate Standard Recovery:

1,2-Dichloroethane-d4	91	%
Toluene-d8	97	%
Bromofluorobenzene	97	%

Comments:

PQL = Practical quantitation limit.
BQL = Below quantitation limit.
Quantitation limit elevated due to sample dilution prior to analysis.
Sample diluted due to high concentration of target compounds present.

American Environmental Network, Inc.
149 Rangeway Road
N. Billerica, Massachusetts 01862
978/667-1400
Fax 978/667-7871

CHAIN OF CUSTODY RECORD

RE[illegible]D

CUST. P.O. #	05-28-98
AEN QUOTE #	

REGULATORY CLASSIFICATION - PLEASE SPECIFY

☐ NPDES ☐ DRINKING WATER ☐ MCP GW1 ☒ MCP OTHER GW-2/3
☐ RCRA ☐ NIOSH ☐ OTHER _____

TURN AROUND

☐ 15 BUSINESS DAY
☒ 10 BUSINESS DAY
☐ RUSH _____
☐ OTHER _____

COMPANY	CONTACT PERSON	PROJECT I.D.	PHONE #	FAX #
PHOENIX ENV. SERV., INC.	DOUG COREY	ATF - DAVIDSON WHITINSVILLE	781 275-2970	781 275-3557

ADDRESS		
P.O. BOX 276		
CITY	STATE	ZIP
BEDFORD	MA	01730

DATE	TIME	SAMPLE I.D.	MATRIX	CONTAINER TYPE	# OF CONTAINERS	PRESERVATIVES	REQUESTED PARAMETERS: VOA (8260)									(COMMENTS)
5/28/98	12:00	MW-6	GW	√	3	HCl	X									
↓	13:00	MW-8	↓	↓	↓	↓	X									

SAMPLED BY: DOUGLAS M. COREY (PRINT NAME) Douglas M. Corey (SIGNATURE)

RELINQUISHED BY (SIGNATURE)	DATE / TIME	RECEIVED BY	DATE / TIME
Douglas M. Corey	5/28/98 3:15 pm		
RELINQUISHED BY (SIGNATURE)	DATE / TIME	RECEIVED FOR LAB BY	DATE / TIME

AEN USE ONLY

FIELD REMARKS

APPENDIX B

Notice to Public Officials

[Legal Notice]

NOTICE OF AN ENVIRONMENTAL RESPONSE ACTION

ATF Davidson
1 Main Street, Northbridge, MA 01588
RTN 2-0111

Pursuant to the Massachusetts Contingency Plan [310 CMR 40.1403(3)] adopted by the Department of Environmental Protection, notice is hereby given that the item(s) checked below applies to this site:

( ) Implementation of Phase IV Remedial Actions
( ) Use of Respirators & Protective Clothing
( ) Sampling of Private Drinking Water Wells/ Indoor Air/ or Surficial Soils at Residential Property
( ) Immediate Response Action (IRA) involving Imminent Hazard
( ) IRA Completion Statement Availability for Above IRAs
( ) Release Abatement Measure (RAM) Implementation
( ) Phase I Initial Site Investigation Report Availability
( ) Subsequent Phase Report Availability
(X) Response Action Outcome (RAO) Statement Availability
( ) Downgradient Property Status (DPS) Submittal Availability.

PROJECT SUMMARY (Purpose, Nature, Expected Duration, etc.)

Elevated levels of chlorinated solvents (including vinyl chloride) and barium were identified in groundwater at the subject site in 1985. Subsequent assessment and monitoring activities have indicated that contaminant concentrations have been reduced by natural attenuation to levels within the applicable Method 1 Cleanup Standards established by the Mass. Dept. of Environmental Protection (DEP).

A Class B-1 Response Action Outcome (RAO) Statement has been submitted to DEP demonstrating that a Permanent Solution has been achieved with a level of No Significant Risk of harm to health, safety, public welfare and the environment.

Any person interested in obtaining additional information or purchasing a copy of the document(s) (where applicable) may contact Kroll Associates, Inc. (978-443-1833) or the Central Regional Office of DEP (508-792-7650).

cc:
Chief Municipal Officer
Board of Health

[Legal Notice]